

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
11 March 2004 (11.03.2004)

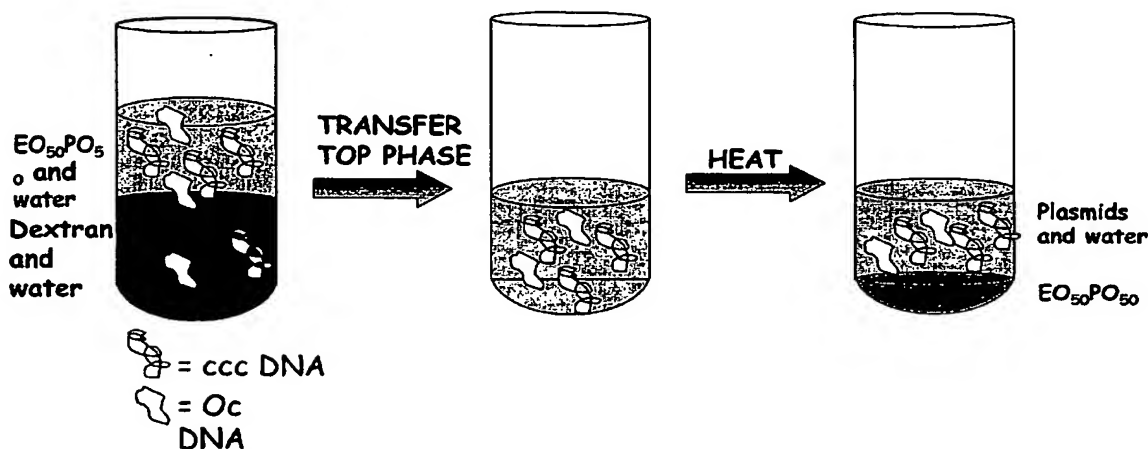
PCT

(10) International Publication Number
WO 2004/020629 A1

- (51) International Patent Classification⁷: **C12N 15/10**
- (21) International Application Number:
PCT/SE2003/001016
- (22) International Filing Date: 17 June 2003 (17.06.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0202552-6 27 August 2002 (27.08.2002) SE
- (71) Applicant (for all designated States except US): **AMERSHAM BIOSCIENCES AB** [SE/SE]; Björkgatan 30, S-751 84 Uppsala (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **KEPKA, Cecilia** [SE/SE]; Kämnärsvägen 11 O:222, S-226 46 Lund (SE). **RHODIN, Jenny** [SE/SE]; Sofiaparken 6 B, S-222 41 Lund (SE). **TJERNELD, Folke** [SE/SE]; Stenhuvudsgatan 29, S-216 17 Limhamn (SE).
- (74) Agents: **KILANDER, Annika** et al.; Amersham Biosciences AB, Patents Department, Björkgatan 30, S-751 84 Uppsala (SE).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: RECOVERY OF PLASMIDS IN AN AQUEOUS TWO-PHASE SYSTEM

EO₅₀PO₅₀/DEXTRAN T 500 SYSTEM



(57) Abstract: The present invention is a method for the purification of plasmid DNA comprising to provide a composition comprising a first polymer having inverse solubility characteristics and a second polymer immiscible in the first polymer; contacting said solution with an aqueous solution comprising plasmid DNA; providing phase separation and isolating the aqueous phase; and increasing the temperature of the isolated phase to a temperature above the cloud point of the first polymer and below the temperature where plasmid DNA is degraded and subsequently isolating the aqueous phase so formed. The invention also encompasses a kit for purification of plasmid DNA as described above.